

FIG. 1

Numin Numin Numin	até C Photopic ale D65 ate A ate C Scotopic pe Blue Light	TRANS 7.92% 7.92% 7.44% 9.79% 6.84% 0.00% 0.00%	x 0.2698	y 0.3023	3	TRANS TEST X Y Z	50.3 Red 5.82% Fail 0.83	Yellow 6.90% Fail 6.00 4.72 0.02	Green 8.55% Fail 0.93 1.85 2.21 0.1869	D65 7.92% 7.23 8.37 10.99 0.2719
UU	%T		nm	%T	•	ζ γ		0.4396	0.3708	0.3148
300	0.00		550	8,16		Chromitic	Σtγ	Pass	Pass	Pass
310	0.00		560	7.98		-				
320	0.00	-	570	7.68		This is a	SPECIAL	PURPOSE	LENS	
330	0.00		580	7.14		-			'	
340	0.00		590	5.64		CEN 84	_			-
350	0.00		600	6.27		*****	Red	Yellow	Green	Blue
360	0.00		610	5.96		TRANS	5.98%	6.88%	8.54%	9.13%
370	0.00		620	5.73		Q	0.75	0.87	1.08	1.15
380	0.00		630	5.57		TEST	Feil	Pasa	Pass	Pass
390	0.00		640	5.58						
400	0.06		650	5.78		•				•
410	0.93		660	6.11						
420	3.05		670	6.51		2 0.1. 1.				
430	5.28		680	6.96		This is a	FILTER CA		•	
440	7.77		690	7.40		T1000 0		Max	Test	Delta
450	10.05		700	7.82		T(280-315)		0.00	Pass	0.79
460	11.74		710	8.28		T(316-350)		0.00	Pass	3.96
470	12.76		720	8.72		SOLAR UV	A	0.00	Pass	3.96
480	13.30		730	9.17		****				
490	13.27		740	9.67		AUSTRALL	AN STANDA			
500	8.06		750	10.15			Red	Violet		
510	8.49		760	10.63		FACTOR	0.73	0.93	•	
520	8.88		770	11.10		This is a	SPECIFIC			
530	8.75		780	11.50		*	FAIL	FAIL	•	
540	8.40 .	-	790	11.83	,				_	

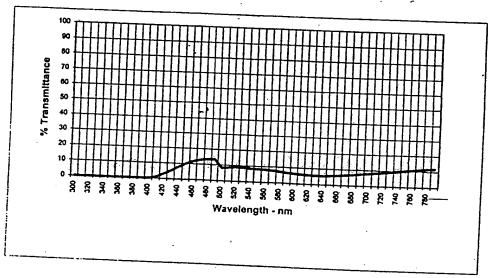


FIG. 2

Definition - ANSI Z87.1

COLTS Control Number: **Z-BZS031601-02-01**

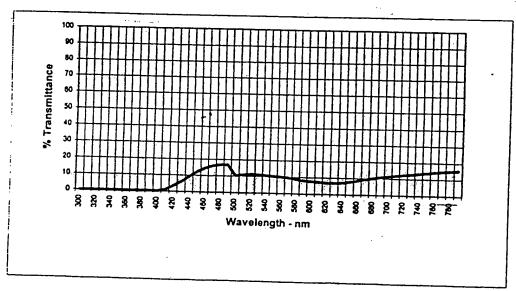
	>ampies	Sample Grou	Material)	Coatings (Hard Coat, AR, etc						
	ample Group	Lens Material:	unk	Type:	Polarized					
Manufacturer:	Bayz	Index of Refraction:		Comm	<u> </u>					
Lens Type:	FSV	Lens Density:		- 00111111	ents.					
Requested By:	DR. Ishak	Report valid thru:	09/16/01	Polariź	ed / Grey					

Test Number	Definition	Pass/Fail
Z-BZS031601-02-01-01	28	Pass
Z-BZ\$031601-02-01-02	34	
Z-BZS031601-02-01-03		Pass
	34	Pass

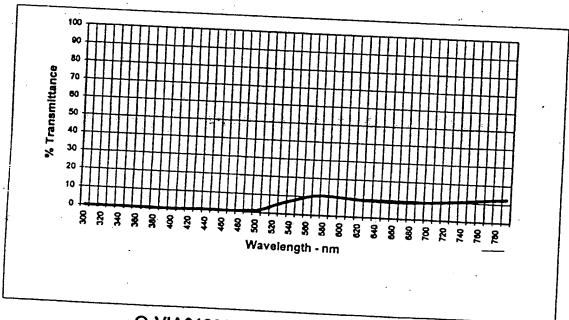
ANSI Z87.1 Requirement
Pattern 20 in both directions

FIG. 2A

	- C Dt	TRANS	×	y	ANSI Z80.3	3			
	e C Photopic	9.91%	0.2685	0.3050		Red	Yellow	Green	D65
th minat		9.91%			TRANS	7.43%	8.52%	10.79%	9.915
Illuminat		9.27%			TEST	Fail	Pass	Pass	
	e C Scotopic	12.34%			X		7.41	1.16	8.92
_	Blue Light	8.46%			Y	0.81	5.83	2.34	10.4
UVA		0.00%			Z		0.02	2.75	
U.VB		0.00%		₫.	×		0.5590	0.1854	0.270
				•	у		0.4394	0.3741	0.317
nm	%T		nm	%T	Chromiticity		Pass	Pass	Pass
300	0.00		550	10.27	•				. 430
310	0.00		560	9.98	This is a	GENERAL	. PURPOSE	LENG	
320	0.00		570	9.46				CLITS	
330	0.00	•	580	8.67	CEN 94				
340	0.00		590	8.01		Red	Yellow	Green	.
350	0.00		600	7.56	TRANS	7.39%	8.50%		Blue
360	0.00		610	7.19	Q	0.75	0.86	10.78%	11.649
370	0.00		620	6.88	TEST	Fail		1.09	1.17
380	0.00		630	8.75	1231	raii	Pass	Pass	Pass
390	0.00		640	7.02					
400	0.05		650	7.68					
410	0.95		660	8.53					
420	3.41		670	9.38	This is a F	II TED O	T-000***		
430	6.13		680	10.17	1149198 1	ILIER C	TEGORY 3		
440	9.33		690	10.82	T(280-315)		Max	Test	Deitz
150	12.37		700	11.37	T(316-350)		0.00	Pass	0.99
60	14.65		710	11.90	SOLAR UVA		0.00	Pass	4.96
170	16.06		720	12.38	0000000		0.00	Pass	4.96
180	16.74		730	12.87	AUSTRALIA	N CTANO			
190	16.69		740	13.37	VOSTIVATIVA				
500	10.41		750	13.84	FACTOR	Red	Violet	•	
10	10.92		760	14.31		0.73	0.91		
20	11.36		770	14.77	inisis # G	CHEKAL:		SUNGLASS	
30	11.13		780	15.15		FAIL	PASS		
40	10.62		790	15.47					



llumir Ilumir Ilumin	nate C Photopic nate 065 nate A arte C Scotopic ge Blue Light	TRANS 7.66% 7.81% 8.52% 2.96% 0.34% 0.00%	x 0.4803	y 0.4827	ANSIZ TRANS TEST X Y Z	Re	% 9.79% I Fail 9.11 9.69 0.02	Green 6.31% Fail 0.75 1.37 0.13	
ĐΜ	%T			*	х У		0.5758 0.4232	0.3352	,,,,
300	0.00		nm	%T:	Chromit	icity	Pass	0.6063 Pass	
310	0.00		550	8.54		·		F#33	Pass
320	0.00		560	9.83	This is a	SPECH	L PURPOSE	ENG	
330	0.00		570	10.59				LC13	
340	0.00		580 590	10.73	CEN 94				
350	0.00	•	600	10.49		Red	Yellow	Green	~
360	0.00		610	10.15	TRANS	9.57%		6.31%	Blue
370	0.00		620	9.77	Q	1.26	1.28	0.83	4.38% 0.58
380	0.00		630	9.46 9.20	TEST	Pass		Pass	Fail
390	0.00		640	9.00				. 554	Fan
400	0.01		650	8.87			•		
410	0.11		660	8.83					
420	0.30		670	8.86		_			
430	0.37		680	8.98	This is a	FILTER (ATEGORY 4		
440	0.38		690	9.15	****		Max	Test	Deita
450 460	0.36		700	9.38	T(280-31		0.00	Pass	0.76
	0.35		710	9.68	T(316-350		0.00	Pass	3.81
470	0.36		720	10.01	SOLAR U	VA	0.00	Pass	3.81
480 490	0.48		730	10.37	A11000				
500	0.88		740	10.77	AUSTRAL	IAN STAN	DARDS		
510	1.09	•	750	11.17	546705	Red	Violet		
520	2.33	;	760	11.56	FACTOR	1.20	0.04		
530	4.19	7	770	11.97	This is a	SPECIFIC			
540	5.87	7	780	12.31		FAIL	FAIL	•	
V-10	7.23	7	790	12.58					



O-VIA012901-04-01 (Amber Mirror)

For Test: Definition - ANSI 287.1

Lens	Samples Sample Group		s Material)	L'IPTION Coatings (Hard Coat, AR, etc
Manufacturer:	-		unk	Type: Polarized
	Bayz	Index of Refraction:		Comments:
ens Type:	FSV	Lens Density:		
Requested By:	DR. Ishak	Report valid thru:	09/16/01	Polarized / Amber

Test Number	Definition	Pass/Fail
Z-BZS031601-01-01-01	20	Pass
Z-BZS031601-01-01-02	34	Pass
Z-BZS031601-01-01-03	34	Pass
		F485

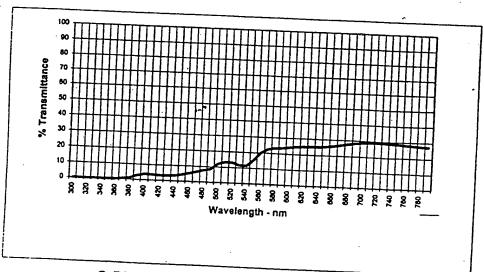
ANSI Z87.1 Requirement
Pattern 20 in both directions

FIG. 4A

														-						_		_	•			_	•		_		-		-	-	•		,			
M									NS			×				y							Αŀ	151	7	8A	•													
llumin; Uvmin;	ste C	Pho	top	iC					1%		0	.476	8		0		22						•	•••		ω.		R	eđ			Yell	.			_		_	_	
lluming		13							5%														TF	w	45		•	11.7		۷.		2.5					196		-	X85
llumine		۶		:_					9%	•													TE		-			Pa		•	١	Pa:					24% 838		9.	35%
Averag	e Rhy	• 1 :	iopi ahi	C				1.94															X					٠.				11.					833 .97			
UVA	-		Jus).51															Y					1.2	28			8.5					.¥7			.15
UVB								.00														;	Z						••			0.0	-							.41
•••							O.	.00	7%								ġ'					,	K									.57	_				19			84
DOT		%	_																			,	,									.42					308 054			742
300		0.0	_	_		_					_	nn		_	- 2	6T	•						Chr	ОП	riti	cit	,					Pas			,		U54 I38			863
310 😙		0.0	-									550			11	.1	0	_								•							•			ra	38		Pa	33
320		0.0										60				.6						1	Thi:	is	8		GE	NE	RA	1 F	115	RPC	26	E I		ue				
330		0.0									-	70			13																٠.	٠.	~	٠,	LE	113				
340		0.0										80				.64						7	ΈI	1 9	4		_	_	_	<u> </u>	-	_		_		-		_	<u> </u>	
350		0.0										90				.37										1	Rec	f		٧	elk	•			c.					
360		0.0	-									00			12						•	T	RA	N:	S	•		- 2.27	%	•		.52	%	•		eer 3.25		ŧ	Stue	
370		0.0										10			12							Q						1.25				.27				0.8			5.77	
380		0.0										20			12.							T	ES	Ţ				985				855				v.o Pas			0.5	
390		0.0	-									30			11.																•					r as	.3		Fa	14
400		0.0	-									40			11.															•										
410		0.17									66	50			11.																									
420	(0.44	ļ								67				11.																									
430	(0.55	i								68				11.4							Th	iis	i \$ 1	3	F	ILT	ER	C/	NTE	G	אכ	Y 3	3						
440	().55	,								69	-			1.3							_										ax			1	Îes.	ŧ		Delt	9
450	().53									70				1.5	_						•	280			•					0.	00				25			0.98	
480	(.52			٠.		٠	٠,	.•		71				1.5 2.3								316								0.	00				25			4.92	
470	0	.53									72				2.6						•	SC	<u> </u>	VR.	<u>n</u>	<u> </u>	_		_		0.	00			P	851	ľ		4.92	
480	0	.72								`	73	-			3.0								_	_												_				_
490		.28					٠				74	9			3.4						•	N,	51	ĸ	W.	A٨		TAN	ND/											
500		.52									750)			3.8							- 4	^-					be				let					•			
510		.20									780)			1.2								CT		-		1.			_	0.0)5								
520		63									770)			.6	_						f Ma	3 is	a		GŁ	:NE	ERA	ΥL	PU	₹P	os	E	SU	IN(3L/	Š	;		٠
530	· 7.				. •					•	780)			.92	_											FAI	L		-	FA	IL								
540	9.	52								:	790)		15	.16	3																								
												•																	•			-					-	. •		
1			_	_	_	_				_		_	-		_	_							_		_	_			_											
1	100	- 1	Π	Т	П	T	П	П	T	П	Т	П	П	_	_	Ė,	_	_	_	_		_	_	_	_		_				_				_			_		7
	90	+	H	+	Н	╀	H	H	╀	Н	+	Н	Ц	1	L	Ц	1	Ш	1	L	Ш	1	1	П	1	1	П	T	П	Τ	П	Т	П	П	T	П	П			
	80	Н	4	Н	Ц	1	Ц	\perp	Ш	Ц	Ŀ	Ш	П	1	П		1	П	T	Τ	П	T	T	П	1	T	Ħ	1	H	+	H	+	Н	Н	╁	Н	-			
9	70	Ш	1	П		L	П	Т	П	П	П	П	П	T	П	7	7	Ħ	†	+	H	+	+	Н	+	╀	Н	+	Н	+	Н	4	Н	4	4	Ц	4.			1
Ę		П	Т	П	Т	Τ	П	\top	Н	+	11	Н	H	+	Н	+	+	₩	+	╀	H	4	╀	Ц	4	╀	Ц	Ш	Ц	Ц	П	Ш	LI			П	1		•	
Ę	60	Ħ	+	Н	+	╁	H	┿	╁╂	+	H	-11	4	╀	Ц	4	Ļ	Ц	\perp	L	Ц	1	L		1	ı	П	11	П	П	T	П	П	Т	Τ	П	7			
E	50	₩	+	H	+	L	${\sf H}$	1	Ц	1	Ш	Ш	\perp	L	U			П	1		ΙŢ	Γ	П	T	T	T	П	П	1	H	†	Ħ	H	+	+	H	1			
É	40	П	\perp	Ц	1				П	T		1-1	T	Π	П	T	Τ	П	T	Ħ	H	†	Н	+	+	H	H	╁	+	╂╂	+	H	4	+	+	Н	-			1
% Transmittance	30	П	Π	١T	T	П	T	Т	П	1	Ħ	71	+	Н	+	+		H	+	Н	H	1	H	+	+	Н	4	11	1	Ц	1	Ц	1	1	Ц	Ш				1
*		П	Ħ	1	+	H	+	+	H	╁	H	╫	+	H	+	+	H	4	L	Ц	4	L	Ц	1	L	Ц	\sqcup	Ш	1	П	1	П	T	Γ	П	T	1			
	20 -	H	₩	+	+	Н	+	H	Н	1	Ц	44	1	Ц	1	1	Ц	\perp	П	П	1	П	П	I	Γ	П	T	П	T	П	T	П	+	1	H	+	1			1
	10	Н	Ц	1	\perp	Ц	1	Ц	Ц	1	Ш	Ш	1	H	Γ	Γ	П	T	П		I		Ħ	†	H	H	+	H	+	╁	+	₩	╀	╁	Н	+	l			
	0	Ш	Ц		П	1		П	T	П	П	TT		П	†	t		+	П	Ŧ	F	П	Ŧ	ŧ	Ħ	#	+	Ħ	+	Ħ	t	H	#	Ħ	Ц	t				
		8	2	0		-	÷	+	+	∺	+	++	+	+	+	<	Н	+	Ц	4	1	Ц	4	L	Ц	1	1	Ш	П	Ш	ľ	-	1		H	T	ı			1
	•	Ħ	2	ð		3	8	3	Ş	Ş	\$	8		\$	8		8	ş	5	8	3	1	₿.	8		ş	8	8		8	2	→	,	∵	_	- - -	١.			
														,	w			en						•	•	0	Φ	3	•	<	Ľ	2		8	78	?				
															- •	- •	-	411	yı	41	٠,	ım	•																	
																																								1

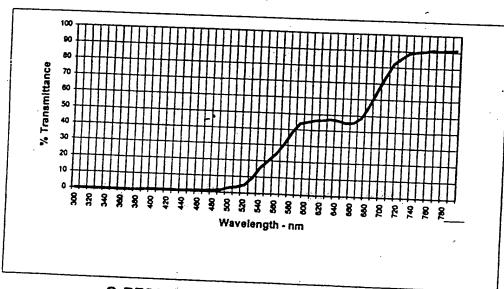
FIG. 5

llumii Ilumii Ilumir	nate C Photopic nate D65 nate A nate C Scotopic nge Blue Light	TRANS 17.80% 17.68% 19.69% 10.41% 4.90% 0.00%	. x 0.4369	y 0.4180	ANSI Z80.3 Red Yellow Green D TRANS 25.38% 22.35% 14.76% 17.6 TEST Pasa Pasa Pasa X 22.21 1.72 19. Y 2.76 15.27 3.20 18. Z 0.03 1.30 6.1
nm	%Т	•			x 0.5920 0.2788 0.43 y 0.4072 0.5137 0.43
300			nn	%T	Chromiticity
310	0.00		550	15.34	Chromiticity Pass Pass Pass Pass
320	0.00 0.00		560	20.06	This is a GENERAL PURPOSE LEVO
330	0.00	•	570	22.41	This is a GENERAL PURPOSE LENS
340	0.00		580	23.37	CEN 94
350	0.00		590	23.60	Red Yellow Green Rham
360	0.12		600	24.11	TRANS 24 83W CO. LAW GIBER BRUE
370	0.63		610	24.62	0 140 400 17.0076 13.53
380	1.07		620	24.90	TEST Page 5.03 U.7/
390	2.81		630	25.05	Pass Pass Fail
400	3.78		640	25.13	
410	3.61		650	25.42	•
420	3.28		660 670	25.98	
430	3.23		680	26.75	This is a FILTER CATEGORY 3
440	3.41		690	27.87	Max Tout Du
450	4.19		700	26.37	T(280-315) 0.00 Page
460	5.26		710	28.82	T(316-350) 0.00 Page
470	6.45		720	29.03	SOLAR UVA 0.00 Pass 8.84
480	7.58		730	29.05	
490	8.57		740	28.95 28,74	AUSTRALIAN STANDARDS
500	12.08		750	28.49	Red Violet
510	13.35		760	28.20	FACTOR 1.42 0.24
520	13.17		770	27.83	This is a GENERAL PURPOSE SUNGLASS
530	11.59		780	27.54	PASS FAIL
540	11.46		790	27.25	•



O-BZS030701-01-01 (Ray Ban Daddy O)

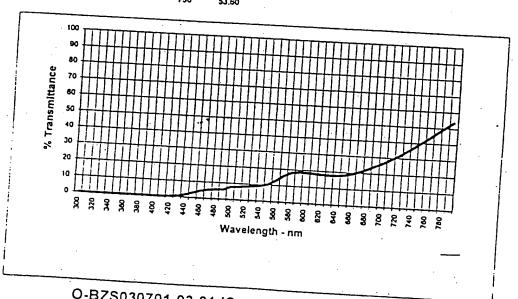
llumin Ilumin Ilumin	ate C Scotopic	TRANS 24.30% 23.97% 29.70% 6.40%	x· 0.5425	y 0.4364	•	ANSI Z TRANS TEST X	Red	Pass	Green 15.31% Pass	
	ge Blue Light	0.85%				Ŷ		39.24	2.32	31.29
UVA		0.01%				Ž	5.13	25.37	3.32	25.33
UV8		0.00%				_		0.04	0.26	1.18
					, i	x		0.6069	0.3938	0.5414
nm	%T		nn.	- %T	2	y		0.3924	0.5620	0.4382
300	0.00		550	20.05	, .	Chromiti	icity	Pass	Pass	Pass
310	0.00		560	24.55		<u>.</u>				
320	0.00		570	30.46		This is a	GENERA	PURPOSE	LENS	
330	0.01		580	38.21		-				
340	0:02		590	43.80		CEN 94				
350	0.02		600	44.90			Red	Yellow	Green	Blue
360	0.02		610	46.00		TRANS	46.19%	37.35%	14.95%	12.84%
370	0.04		620	46.28		Q	1.93	1.58	0.62	0.54
380	0.18		630	47.00		TEST	Pass	Pass	Fail	Fail
390	0.44		640	46.23						,
400	0.70		650	46.23 44.91						
410	0.62		660							
420	0.50		670	45.28		_				
430	0.51		680	48.40		This is a	FILTER CA	TEGORY 2		
440	0.57		690	55.47 64.74				Max	Test	Delta
450	0.73		700	73.63		T(280-315		0.00	Pass	2.40
480	0.89		710	73.63 81.96		T(316-350		0.00	Pass	11.98
470	0.96		720			SOLAR U	VA	0.00	Pass	11.98
480	1.12		730	85.52						
490	1.62		740	88.83		AUSTRAL	IAN STANDA	RDS		
500	2.88		750	89.54			Red	Violet	•	,
510	3.40		760	90.08		FACTOR	1.93	0.03		
520	4.76		770	90.94		This is a	GENERAL P		UNGI ASS	
530	9.19		770 780	90.55			PASS	FAIL		
540	15.54			91.03						
			790	91.27 .						



O-BZS030701-02-01 (BluBlocker 1870)

FIG. 7

	nate C Photopic	TRANS 12.83%	x . 0.4465	у	ANSI	Z80.3			
	nate D65	12.74%	0.4405	0.4204		R	ed Yellon		
	nate A	14 34%			TRAN				
llumir	nate C Scotopic	7.18%			TEST	Pa		,	12.74
Avera	ige Blue Light	2.58%			. X		16.43		
UVA		0.00%			Y	2.0			14,1
UVB		0.00%		•	Z	4.0			13.4
	•	0.00%			x		0.02	0.91	4.06
nm	%T		Ωm		. y		0.5939 0.4053	. 4.2000	0.445
300	0.00			· %T	Chromit	icity	Pass	0.0000	0.425
310	0.00 ·		550	10.46	•	•	r a33	Pass	Pass
320	0.00		560	12.93	This is a	GENE	RAL PURPOSI		
330	0.00	• .	570	15.91	_		- COKPOSI	E LENS	
340	0.00	•	580	18.08	CEN 94				
350	0.00		590	18.56		Red	U		
360	0.00		600	18.50	TRANS	18.369	Yellow	Green	Blue
370	0.00		0 10	15.16	Q	1.44	. 10.7776	10.26%	9,58%
380	0.00		620	17.89	TEST	Pass		0.81	0.75
390	0.00		630	17.72		F433	Pass	Pass	Fail
400	0.00		640	17.78					
410	0.04		650	18.26					
420	0.23		560	19.25					
430	0.56	. 6	70	20.68	This is a				•
440	1.63		80	22.51	**** (3 d	FILTER C	ATEGORY 3		
450	3.07		90	24.44	T(280-315)		Max	Test	Delta
460 .	4.48		00	26:52	T(316-350)	,	0.00	Pass	1.27
470	5.36		10	28.97	SOLAR UV		0.00	Pass	6.37
480	5.72 .	72		31,41	20000		0.00	Pass	6.37
490	5.89	73	-	34.13	AUSTRALI	AM 67			
500	7.66	74	- '	37.26	AUSTRALI	W STAND			
510	7.93	75	-	40.38	FACTOR	Red	Violet		••
520	8.32	760	-	13.65		1.42	0.18		
30	8.77	770		7.20	***************************************	PACC	PURPOSE SU	INGLASS	
40	9.30	780		0.53		PASS	FAIL	•	
	00	790	5	3.60					

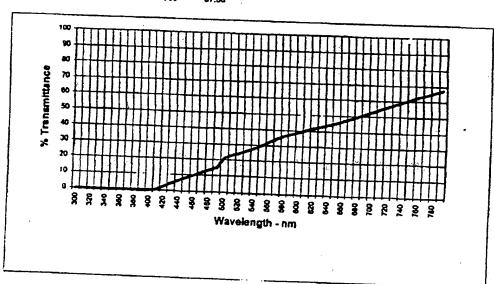


O-BZS030701-03-01 (Costa Del Mar Islamorada)

FIG. 8



Stamin:	ZN C Photopic	31,10%	0.4258	0.4257	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	~.5			
Rumine	PM D65	31.01%	4.4250	0.4252	_	Red	Yellow	Green	065
llumina	ete A	33.83%			TRANS	44.06%	37.10%	27.37%	31.01%
	ete C Scotopic	19.23%			TEST	Pass	Pass	Page	
	pe Blue Light	6.93%			X		36.89	2.98	32.20
UVA	, s sast egge	0.00%			Y	4.80	25,35	5.93	32.77
UVB		0.00%			Z		0.06	2.35	10.79
• • •		0.00%			x		0.5921	0.2646	0.4250
វាភា	*1				y		0.4069	0.5266	0.4325
300	0.00		hm	*1	Chromitic	Żγ	Pass	Pass	Pass
310	0.00		560	30.04	•				
320	0.00		560	32.33	This is a	GENERAL	PURPOSE	LENS	
330	0.00		570	34.41					
340	0.00		580	36.23	CEN DA				
350	0.00		590	37.68		Rad	Yallow	Green	Blue
360	0.00		800	39.03	TRANS	41.77%	37.21%	27.34%	25.06%
370	0.00		510	40.43	Q	1.35	1.20	0.88	0.81
380	0.00		620	41.65	TEST	Pass	Pass	Pass	Pass
390	0.00		630	42.82				1 444	r ens
400	0.02		640	43.97					
410	0.58		880	45.22					
420	2.47		860	46.70					
430	4.45		670	48.24	This is a	FILTER CA	TEGORY 2		
440	6.38		660	49.95			Max	Test	Deta
450	8.20		690	51.53	T(280-315	1	0.00	Pess	
460	9,99		700	5 3.10	T(316-350)	0.00	Pass	3.10
470			710	54.75	SOLARUN	/A	0.00	Pass	15.51
480	11.88		720	56.27	-			. 1 434	15.51
490	13.56		730	57.83	AUSTRALI	AN STANCA	LPne		
500	15.18		740	59.51		Red	Violet		
	21.03		750	61.06	FACTOR	1,40	0.20		
510	23.04		760	62.73					
520 530	24.50		770	64.39		PASS	PURPOSE S	22AEDMU	
540	26.19		780	86.01		•	FAIL		
340	28.02		790	87.56					



O-BZS030701-04-01 (Melavision)

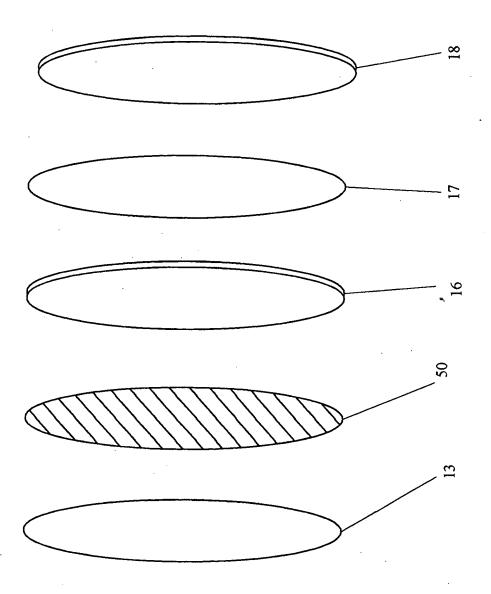


FIG. 10